

77460.ST25.txt  
SEQUENCE LISTING

<110> University of Georgia Research Foundation, Inc  
The Ohio State University  
Maier, Robert J  
Gunn, John S

<120> Hydrogenase Deficient Bacterial Strains

<130> 31725-77460

<150> 60/549,306  
<151> 2004-03-02

<150> 60/604,846  
<151> 2004-08-26

<160> 21

<170> PatentIn version 3.3

<210> 1  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 1  
tagtggtttg ggataaacgt tatgcaaaca gtgtaggctg gagctgcttc g  
51

<210> 2  
<211> 50  
<212> DNA  
<213> Samonella typhimurium

<400> 2  
attgagacct ccgaatcgac gtcatcgta catatgaata tcctccttag  
50

<210> 3  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 3  
tcgtaacgga ataactataa aatgtgtgca gtgtaggctg gagctgcttc g  
51

<210> 4  
<211> 50  
<212> DNA  
<213> Samonella typhimurium

<400> 4  
cccctaagac taatatccgc attacaaaac catatgaata tcctccttag  
50

<210> 5  
<211> 51  
<212> DNA  
<213> Samonella typhimurium

<400> 5

aaaggagaaa aaatacgcgt tatgaataac gtgtaggctg gagctgcttc g  
51

<210> 6  
<211> 50  
<212> DNA  
<213> *Samonella typhimurium*

<400> 6  
atcgttcttt tccttaacgc ttagcgtacc catatgaata tcctccttag  
50

<210> 7  
<211> 232  
<212> DNA  
<213> *Samonella typhimurium*

<400> 7  
gcgtcggcaa tgatcaaatg attacgattc gccatatcgc caagaagttc cattccggcc  
60

acaatacgc a cccgatggc ttcatcggtc agcaaaatat tgccgacccc taagactaat  
120

atccgcatta caaaaactgca caaagcttca tgaaatcacg acggtaatg ccgtgagaag  
180

tgatgagagt attatctcca gtcattttat agttattccg ttacgaagac ct  
232

<210> 8  
<211> 518  
<212> DNA  
<213> *Samonella typhimurium*

<400> 8  
gtactcattt cgacacatg cccagtaaat acgaaacagc agcgcgacag taaaaatata  
60

cggcgtggta aaatggatca gtcgtatcca gcccattccaa aacataaagg tcgcttcacc  
120

ttgaatcgat ggcagggggc ggccaatgaa atatcctgta acagccagga cgacaatgga  
180

taacgccgtg atccagtgcc ataaacggac cggcgcttca tagatatagt acccctggct  
240

ggtttatttct ttgagatgca ttgagacctc cgaatcgctg tcatcgtaact gtttgcataa  
300

cgtttatccc aaaccactat agttagtgtg ggcacatcatat gttgcatttc ttgtcttct  
360

caacgtgttt tagtagcaat tatgtttcta attcgtaaca actgattaca tgtgtgctac  
420

tcacattact caaaaacata aattaattta atgttattgg ttagtggag taaatatagc  
480

gttgtgatgg catctcttaa tggataag aaaccgtg  
518

77460.ST25.txt

<210> 9  
<211> 333  
<212> DNA  
<213> *Samonella typhimurium*

<400> 9  
cttatcgta atccgatacg ctttttac attatttctg gcggatatacg ccgggtgcaaa  
60  
gtgaatcggg ctcgttccg cgctcgcgtaa taacacaatg atttaccttg ctggcggAAC  
120  
gtcaacggac ccgcAAAGC gccttatGCC cctggcggag cgtggtgCAA aaaggagAAA  
180  
aaatacgcgt tatgaataac ggtacgctaa gcgttaagga aaagaacgat gactggAAAG  
240  
ctatctccac gcgtccccca ggcgcgtgat actgccgtca gccactatgt gtttgaagcg  
300  
ccggtaCGCC tgtggcactg gctaACGGTG GCC  
333

<210> 10  
<211> 19  
<212> DNA  
<213> *Samonella typhimurium*

<400> 10  
cacggtttct tatcaacat  
19

<210> 11  
<211> 20  
<212> DNA  
<213> *Samonella typhimurium*

<400> 11  
gtactcattg ccgacacatg  
20

<210> 12  
<211> 20  
<212> DNA  
<213> *Samonella typhimurium*

<400> 12  
ccgggatggc ggttcgcttc  
20

<210> 13  
<211> 20  
<212> DNA  
<213> *Samonella typhimurium*

<400> 13  
gcgtcggcaa tgatcaaATG  
20

<210> 14  
<211> 21

77460.ST25.txt

<212> DNA  
<213> Samonella typhimurium

<400> 14  
cttatcgta atccgatacg c  
21

<210> 15  
<211> 20  
<212> DNA  
<213> Samonella typhimurium

<400> 15  
ggccaccgtt agccagtgcc  
20

<210> 16  
<211> 24  
<212> DNA  
<213> Samonella typhimurium

<400> 16  
gctctagaaa aaatacgcgt tatg  
24

<210> 17  
<211> 25  
<212> DNA  
<213> Samonella typhimurium

<400> 17  
cccaagctta gcgtacctgg acggc  
25

<210> 18  
<211> 24  
<212> DNA  
<213> Helicobacter hepaticus

<400> 18  
ttcgtggtat gaggataatc agcc  
24

<210> 19  
<211> 24  
<212> DNA  
<213> Helicobacter hepaticus

<400> 19  
aataaagcac aactcccgta agag  
24

<210> 20  
<211> 23  
<212> DNA  
<213> Helicobacter hepaticus

<400> 20  
ggcttagatac aagaatcgct aat  
23

77460.ST25.txt

<210> 21  
<211> 23  
<212> DNA  
<213> *Helicobacter hepaticus*

<400> 21  
ctacctaacta ccgcataatc aag  
23